

SUPPORT FOR THE AMENDMENTS

This Amendment cancels Claims 6, 12 and 19; and amends Claim 1. Support for the amendments is found in the specification and claims as originally filed. In particular, support for Claim 1 is found in the specification at page 1, lines 12-14 ("The present invention relates to a silica slurry having low viscosity even for a high silica concentration. This is achieved by using a silica powder having an *uniform particle size* and low agglomeration"). No new matter would be introduced by entry of these amendments.

Upon entry of these amendments, Claims 1-2, 5, 7-8, 10-11, 13-15, 17-18 and 20-24 will be pending in this application. Claim 1 is independent.

REQUEST FOR RECONSIDERATION

Applicants respectfully request entry of the foregoing and reexamination and reconsideration of the application, as amended, in light of the remarks that follow.

The present invention relates to a silica slurry having low viscosity even for a high silica concentration. This is achieved by using a silica powder having an uniform particle size and low agglomeration. The silica powder can be dispersed over a wide concentration range without precipitating and while maintaining a low viscosity. The resulting slurry is excellent in handling, stable with the passage of time, and suitable for high-speed polishing or rough polishing. Specification at page 1, lines 12-17.

Fumed silica produced by Nippon Aerosil Co., Ltd. (tradename VP-OX30) was used to produce Example 1 of the present invention. Fumed silica produced by Nippon Aerosil Co., Ltd. (tradename VP-OX10) was used to produce Example 2 of the present invention. Specification page 10, lines 6-7 and 15-17; page 13, Table 1.

Claims 1-2, 5-6 and 21-24 are rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,699,808 ("Schwertfeger"). In addition, Claims 7-8, 10-15 and 17-20 are rejected under 35 U.S.C. § 103(a) over Schwertfeger in view of U.S. Patent No. 6,280,652 ("Inoue").

Schwertfeger discloses a homogeneous dispersion of amorphous SiO₂ particles in a dispersion medium, wherein the dispersion has a solids content of at least 80% by weight of amorphous SiO₂ particles and the amorphous SiO₂ particles have a ***bimodal particle size distribution***. Schwertfeger at column 3, lines 13-17. The relatively large amorphous SiO₂ particles have a particle size distribution with a d₅₀ of 1-200 µm. Schwertfeger at column 3, lines 65-66. The bimodal particle size distribution is obtained by mixing in amorphous SiO₂ particles, e.g., fused or fumed silica, having a particle size of from 1-400 nm. Schwertfeger at column 4, lines 7-9.

However, Schwertfeger fails to suggest the independent Claim 1 limitations of a "high concentration silica slurry, **consisting of:** a fumed silica powder dispersed in a solvent, ... wherein said silica powder has a ***uniform particle size*** and an average primary particle size of from 0.08µm to 0.8µm".

Regarding Schwertfeger, the Office Action asserts:

[I]t appears that the claimed viscosity is a direct result of the claimed ratio and since the claimed viscosity is implied by the reference, the claimed size ratio is indirectly suggested absence evidence to the contrary. Office Action at page 3, lines 18-20.

However, the viscosity implied by Schwertfeger's pourable slurry is quite different than the viscosity of the slurry of the present invention. Schwertfeger discloses:

A stable homogenous dispersion having a solids content of at least 80% by weight, preferably 83% by weight and particularly preferably 86% by weight, produced in this way remains pourable for at least 2 hours, preferably for 30 minutes, particularly preferably for at least 10 minutes. Schwertfeger at column 5, lines 56-61.

The unstable slurry of Schwertfeger cannot remain in a pourable state for a long time, but instead becomes a solid relatively quickly (hours/minutes). In contrast, the slurry of the present invention is quite stable and can remain in a low viscosity state for one month (see specification at page 13, Table 1). Thus, the Office Action's assertion that Schwertfeger implies the claimed viscosity is incorrect. Schwertfeger fails to suggest the independent Claim 1 limitation that "a ratio B/A is less than 1.5, where A is the viscosity of the slurry measured at the time of preparing and B is the viscosity after one month". Furthermore, because Schwertfeger does not suggest the claimed viscosity, Schwertfeger does not indirectly suggest the claimed size ratio.

Inoue fails to remedy the deficiencies of Schwertfeger with respect to independent Claim 1.

Because the cited prior art fails to suggest all the limitations of independent Claim 1, the rejections under 35 U.S.C. § 103(a) should be withdrawn.

In view of the foregoing remarks, Applicants respectfully submit that the application is in condition for allowance. Applicants respectfully request favorable consideration and prompt allowance of the application.

Should the Examiner believe that anything further is necessary in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

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